

METHOD OF OPERATION  
TELEPHONE CIRCUIT

Supervisor - "A" Position Switchboard - Arranged To Connect To Trouble Desk - For Use Where Zero Operator's Trunks Have - 34 Ohm Sleeve - Full Mechanical Power Driven System.

GENERAL DESCRIPTION

1. This circuit is used to provide a means of communication between the trouble desk and the supervisor, and between the "A" operators and the chief operator's desk, and the supervisor. The circuit is used with zero and intercepting operator's cords whose sleeves are connected to battery through a maximum resistance of 129 ohms.

DETAILED DESCRIPTION

OPERATION ✓

INCOMING CALLS FROM TROUBLE DESK

2. When the talking key at the trouble desk is operated, ground is connected to the L' lead to battery through the TD relay which operates. The operation of the TD relay closes a circuit through the SL relay which operates lighting the division signal lamp. The operation of the TD relay also connects battery through the B9 relays to the jack sleeve as a busy test. When the twin plug of a supervisor's telephone set is inserted in the twin jacks of the circuit, a circuit is closed from ground through the primary windings of the induction coil in parallel, the operator's transmitter, winding of the P relay to battery, operating the P relay. The operation of the P relay extinguishes the division signal lamp, connects the operator's receiver in the circuit and short circuits the 43-F sub-set.

3. When the talking key at the trouble desk is restored to normal, the TD relay is released, in turn releasing the SL relay and extinguishing the division lamp. The twin plug is withdrawn from the jacks, releasing the P relay, thereby restoring the circuit to normal.

INCOMING CALLS FROM OPERATORS

4. When either the chief operator or an "A" operator inserts the plug of a calling cord in the supervisor's multiple jack, a circuit is closed through the SL relay which operates and lights the division lamp. The circuit functions as previously described.

5. When the plug of the zero operator's cord is inserted in the trunk jack, the SL-1 relay is operated, lighting the section lamp. When the twin plug is inserted in the jack, the P relay operates and the circuit functions as described under "Incoming Calls from Trouble Desk".

CIRCUIT REQUIREMENTS

OPERATE

NON-OPERATE

RELEASE

B9 relay Test .070 amp.  
SI Readj. .058 amp.  
SL-1

Test .008 amp.  
Readj. .016 amp.

E462 Test .014 amp.  
TD Readj. .007 amp.

Test .0004 amp.  
Readj. .0008 amp.

H4 Test .058 amp.  
T Readj. .023 amp.

Test .016 amp.  
Readj. .017 amp.

ENG.--TMI-JO.  
11/5/21.

CHK'D.--CHW.

APPROVED - C.L. SLUYTER, G.M.L.